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RNAV NPRM Public Meeting - 12/9/03

The Public Meeting on U.S. DOT/FAA – Proposed Rulemaking on Area Navigation (RNAV) Miscellaneous Amendments took place at the Hyatt Regency Crystal City, Arlington, VA, on December 9, 2003. The attendance list is provided as attachment 1. Dr. Kathy Abbott opened the meeting and reviewed the agenda. She provided the background on the NPRM from 12/17/02, a result of Federal Aviation Administration's desire to update the Federal Aviation Regulations (FARs) promoting enabling technology that would allow for the transition to a performance based system. A partial reopening was published on 4/8/03; and, a subset of the Notice of Proposed Rulemaking (NPRM) was then published as a final rule covering Air Traffic Service (ATS) Routes, etc. One request was that the Associate Administrator for Regulation and Certification task the Terminal Area Operations Aviation Rulemaking Committee (TAOARC) to be the public forum to dispose of comments. As a result, a subcommittee of the TAOARC was tasked to develop these recommendations. This public meeting is to review and or receive additional comments. Information from this meeting will be presented to the TAOARC for review.

Mr. John McGraw also noted his thanks for the development of the additional NPRM work.

Mrs. Cindy Nordlie reminded those attending of the need for registration.

Dr. Abbott then presented the NPRM comments developed by the government industry team that reviewed the NPRM and the recommended disposition of comments. She asked the audience to provide additional comments/inputs as she reviewed them. Dr. Abbott then covered the process used for comment disposition: acceptance, withdraw, or withdraw for additional (supplemental) rulemaking.

The recommended resolution document was previously posted on the FAA website and in the Federal Register for public review. Dr. Abbott reviewed the TAOARC recommendations

Additional comments were received on the following sections.

14 CFR §121.99

Capt. Ken Speir of Delta Airlines questioned if the term voice was required in the last sentence? Dr. Abbott stated that the intent was to say that a voice capability between aircraft and Air Traffic Services existed.

Capt. Frank Alexander, Northwest Airlines asked about adding words from the legal interpretation from Southern Region. Dr. Abbott replied yes and asked Mr. Dave Catey if he had a copy of the legal interpretation.

Mr. Dave Catey stated that Capt. Alexander was correct, that the interpretation is the 1964 interpretation and it is not an absolute. The interpretation recognized the limitations of high frequency (HF) communications, work fine under normal operating conditions. Mr. Catey provided a certified copy of the interpretation.

Mr. Tom Imrich noted two points. First, that the regulatory language is relatively unusual, and as a minimum, clarifying language is required. He stated that while one could live with that language it is probably not the best. Further, he stated that we have to be careful with the use of voice communications with Air Traffic Control units. He noted that you do have communications with the service provider and that the interpretation is the issue. There might be improved ways of stating this without the probability of inappropriate interpretations.

Capt. Frank Alexander noted that based on comments, it is not clear at this point what action to take. He believes that we [the public] need clarity before the public can comment on it. Saying, I would like to see in a public arena, what words will be added from the interpretations.

Mr. John Goodman, Radio Propagation Services, Incorporated provided supplementary comments contained in attachment 2 to this summary.

Dr. Abbott completed the review of the TAOARC NPRM recommendations.

Mr. John Goodman asked, what happens next? Dr. Abbott stated that comments and inputs will be documented and included in the minutes and made available to the public. The FAA will take the recommendations and move forward as the FAA chooses to do so.

Mr. Tom Imrich added, for the record, the groups that did the work did a thorough and good job for the most part. The areas identified for supplemental rulemaking need to be transferred appropriately.

Dr. Abbott noted that these need to be discussed more in depth at the upcoming TAOARC Joint Steering Committee (JSC) meeting. Further, that there will be a need to promulgate them through all relevant materials, e.g., Advisory Circulars.

Mr. John Goodman asked if there were any written comments provided for people who could not attend. Dr. Abbott responded that none were received.

Dr. Abbott identified that the primary area where comments were received during this meeting was 14 CFR §121.99. She then asked if there were any other comments. As there were none, she adjourned the meeting and thanked the audience for attending.

## **RNAV NPRM**

## Sign In Sheet December 9, 2003

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## RPSI Supplementary Comments Concerning Rapid Communications in 121.99(a)

[Written comments submitted at FAR 1231.99 public meeting on December 9, 2003 at the Hyatt Regency Hotel in Crystal City, Arlington, Virginia and relating to Docket No. FAA-2002-14002]

Our observations are limited to the conclusions drawn regarding the definition of "rapid" communications for oceanic and remote regions, those potentially served by HF. Other commenters have recommended, should the services of TAOARC be employed, that their deliberations include industry experts in using HF for en route communications.

In RPSI's comments, we pointed out that current scientific, engineering and operational knowledge indicate with reasonable certainty that LDOC radio voice service could be provided on a global basis, with availability within four minutes 95 % of the time.

We understand that concerns of meeting a "hard" standard in such a variable medium as the ionosphere is one factor militating against pursuing this suggestion.

A group of experts could assess the architecture we suggest (and any other suggested candidates), agree on a statistical standard and then, if adequate performance is substantiated, recommend an Advisory Circular stipulating that participation in such a service network would meet the standard. The group of experts should include at least one industry representative who can speak authoritatively to the issue of voice service during periods of stress.

These are difficult financial times for the airline industry; another concern is cost. We estimated a capital cost of approximately \$9 million to provide the required global infrastructure and suggest a government-backed bond to be amortized by user fees.

In summary, we suggest a group be designated to include an expert in HF en route communications, to explore the potential for HF reliability in remote and oceanic regions, develop a statistical standard for satisfactory HF communications (similar to the criteria used for satellite Controller / Pilot Data Link Communications - CPDLC) and recommend Advisory Circular language for compliance with a rapid and reliable standard. We believe that obstacles to funding the relatively small cost of the required infrastructure can be overcome.

I certify that the following is a retyped copy of Interpretation of CAR 40.36, dated April

16, 1964, and signed by James B. Minor, GC-20.

Donald P. Byrne

Assistant Chief Counsel for Regulations, AGC-200

Office of the Chief Counsel

Interpretation of CAR 40.34

Associate General Counsel Regulations & Codification Division

Chief, Operations Division, FS-400

You requested in your memorandum of April 7, 1964, our opinion as to whether or not a minimum reception altitude for VHF communications of 28,000 feet, (and therefore a MEA of 18.000 feet) would create any problem in approving an air carrier route in view of the language in Section 40.34 of the Civil Air Regulations.

Section 40.34 requires that the air carrier show that a two-way air-ground radio communication system is available along a proposed route and that this communications system "will insure reliable and rapid communications under normal operating conditions over the entire route."

It is our understanding that you are concerned with the possibility of an aircraft encountering emergency conditions, such as cabin depressurization, that would require temporary operations below the minimum reception altitude. The question specifically appears to be whether or not the term "under normal operating conditions" would relieve the strictness of the language requiring "reliable and rapid communications . . . along the entire route,".

Amendment 40-3 published in 19 F.R. 1455 effective April 1, 1954, added the language "under normal operating conditions." In speaking to this point the preamble stated as follows:

"The Board's attention has been called to the fact that 40.34 has been construed by some persons so as to impose an <u>absolute condition</u> upon air carrier communications. The provision for "reliable and rapid communications" required by this section was intended to be subject to a determination by the Administrator that reliability and rapidity are reasonably assured in the light of the current state of the aeronautical and communications arts. Since some difficulty has been experienced in the interpretation of this requirement, the words "under normal

operating conditions" are being added to protect against unreasonable restrictiveness in its enforcement." (Underlining provided.)

The language in this paragraph indicates that the capability of the communications system need be consistent with the current state of the art, when the system is operating under normal conditions along the approved route. "Reliable and rapid" communications is not required to be an <u>absolute condition</u>. Temporary interruption by conditions other than "normal operating conditions" are not intended to preclude the approval of the route. These conditions might include atmospheric or meteorological interference with communications or other operating conditions not anticipated in the normal course or operations.

It would therefore appear that the possibility of an emergency requiring temporary deviation from the minimum reception altitude would not, in and of itself, prohibit the approval of a roué under Section 40.34

James B. Minor, GC-20

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